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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,122	01/10/2002	Jason Gonzalez	10011019-1	8110

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

GARBOWSKI, LEIGH M

ART UNIT	PAPER NUMBER
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2825

DATE MAILED: 01/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/044,122

Applicant(s)

GONZALEZ, JASON

Examiner

Leigh Marie Garbowski

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AW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1, 8 and 10 is/are allowed.
- 6) ☒ Claim(s) 2 and 11 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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Election/Restrictions

Applicant's election without traverse of Group I claims 1-2 in Paper No. 5 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "where R_o comprises said signal driver output *resistance* (emphasis added)", does not reasonably provide enablement for "where R_o comprises said signal driver output impedance". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The antecedent basis for "said characteristic capacitance" is not clear because there is both a calculated and a redistribution metal characteristic capacitance recited in claim 1.

Allowable Subject Matter

Claims 1, 8 and 10-11 are allowed.

Claim 9 is objected to as being dependent upon a rejected base claim.

The following is an examiner's statement of reasons for allowance: the prior art of record does not disclose or suggest a method for controlling the slew rate of a signal driven by a signal driver characterized by an output impedance onto a transmission line of an IC device, particularly comprising calculating an interconnection path characterized by a redistribution metal characteristic capacitance substantially equal to said calculated characteristic capacitance, in combination with the entire method as recited; an IC, particularly comprising redistribution metal connecting said signal driver to said transmission line, said redistribution metal selected to be characterized by a redistribution metal characteristic capacitance that is determined by calculating said redistribution metal characteristic capacitance which together with said signal driver output impedance will produce a resulting time constant on said transmission line to achieve a desired slew rate on said transmission line when said signal transitions from a first state to a second state, in combination with the entire IC as recited.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakamura et al. [U.S. Patent #5,699,264] disclose computing time constants. Young et al. [U.S. Patent #6,038,383] disclose selecting wire widths.


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Laubhan [U.S. Patent #6,182,269 B1] discloses parasitic RC extraction using threshold percentage parameters. Bowen et al. [U.S. Patent #6,279,142 B1] disclose selecting new wire geometries if slew rate criteria are not satisfied, which can be passed to a routing tool. Bonaccio et al. [U.S. Patent #6,345,380 B1] disclose reducing voltage bounce by using alternative paths for switching circuits. Muddu et al. [U.S. Patent #6,353,917 B1] disclose determining switching factors for optimizing an IC design with suggestions for routing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leigh Marie Garbowski whose telephone number is 571-272-1893. The examiner can normally be reached on days.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Smith can be reached on 571-272-1907. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9318.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1782.


LEIGH M. GARBOWSKI
PRIMARY EXAMINER